

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of separating metal particulates from a slurry ~~of original constituents~~ consisting essentially of liquid reducing metal, ~~and reaction products of~~ metal particulates, and salt particulates, comprising the steps of:

concentrating the slurry ~~reaction products~~ by removing at least ~~some a~~ portion of the liquid reducing metal to form a concentrated slurry; and

passing the at least one constituent selected from the group consisting of a separately prepared liquid reducing metal or a separately prepared liquid of the original salt constituent or a mixture thereof at a temperature greater than the melting point of the original salt constituent through the concentrated slurry ~~reaction products~~ to thereby further concentrate the metal particulates while maintaining the metal particulates below the sintering temperature thereof, wherein the at least one constituent removes to dissolve or displace the salt particulates and the liquid reducing metal in the concentrated slurry from the metal particulates of the concentrated reaction products,

~~and thereafter separating the metal particulates from the remaining original constituents or a mixture of the salt constituent.~~

2. (Currently Amended) The method of claim 1, wherein a gel is formed when at least ~~some~~ a portion of the liquid reducing metal is removed.

3-5. (Cancelled)

6. (Currently Amended) The method of claim 1, wherein the ~~original constituent of~~ liquid reducing metal is an alkali or an alkaline earth metal or mixtures thereof.

7. (Currently Amended) The method of claim 1, wherein the separately prepared liquid salt ~~liquid original salt constituent or mixture thereof~~ is maintained at a temperature below the sintering temperature of the metal particulates ~~during the further concentration thereof~~.

8. (Currently Amended) The method of claim 7, wherein the separately prepared liquid salt ~~mixture of the original salt constituent~~ is substantially the an eutectic or ~~substantially the eutectic~~ of NaCl and CaCl₂ CaCl₂.

9. (Original) The method of claim 1, wherein the metal particulates are a Ti or Ti alloy.

10. (Original) The method of claim 9, wherein the Ti alloy is 6% Al, 4% V and the remainder substantially Ti.

11. (Currently Amended) The method of claim 1, wherein the liquid reducing metal is sodium heated to a temperature greater than about 600°C.

12. (Currently Amended) The method of claim 11, wherein the sodium is heated to a temperature greater than about 800°C.

13. (Currently Amended) The method of claim 1, wherein the separately prepared liquid salt ~~a liquid of the original salt or a mixture thereof~~ is heated to a temperature greater than about 600°C.

14. (Currently Amended) The method of claim 1, wherein the metal particulates are Ti or a Ti alloy and the liquid reducing metal is Na and the salt particulates are NaCl.

15. (Original) The method of claim 14, wherein the metal particulates are a Ti alloy of 6% Al and 4% V and the remainder being substantially Ti.

16. (Currently Amended) A method of separating metal particulates from a slurry ~~of original constituents~~ consisting essentially of liquid reducing metal, ~~and reaction products of~~ metal particulates, and salt particulates, comprising the steps of:

introducing the slurry ~~of original constituents~~ into a vessel having a separately prepared liquid salt therein, ~~wherein~~ the constituents of the slurry and of the separately prepared liquid salt layers

form layers due to density differences ~~with~~ between the liquid reducing metal ~~being the lightest~~ and the metal particulates, wherein ~~being the heaviest increasing~~ the concentration of the metal particulates is increased at ~~toward~~ the bottom of the vessel; ;

removing the liquid reducing metal from the vessel; ;

separating the concentrated metal particulates along a portion of the ~~with some~~ liquid salt from the vessel; ;

filtering the withdrawn portion of the liquid salt from the separated and concentrated metal particulates and,

~~and thereafter cooling and water washing the~~ remaining liquid salt from the separated and concentrated metal particulates.

17. (Currently Amended) The method of claim 16, wherein the separately prepared liquid salt is substantially the same as the salt particulates.

18. (Currently Amended) The method of claim 16, wherein the separately prepared liquid salt is a mixture of the salt particulates.

19. (Currently Amended) The method of claim 16, wherein the separately prepared liquid salt is a ~~an eutectic or~~ substantially the eutectic of the salt particulates.

20. (Currently Amended) The method of claim 19, wherein the eutectic contains ~~Na~~ NaCl₂ and CaCl₂.

21. (Currently Amended) The method of claim 16, wherein the separately prepared liquid salt is maintained at a temperature of less than about 800°C.

22. (Currently Amended) The method of claim 16, wherein the separately prepared liquid salt is maintained at a temperature of about 600°C.

23. (Currently Amended) The method of claim 16, wherein the liquid reducing metal is an alkali or alkaline earth metal or mixtures or alloys thereof.

24. (Currently Amended) The method of claim 16, wherein the liquid reducing metal is Na or Mg.

25. (Cancelled)

26. (New) The method of claim 1, wherein the separately prepared liquid salt is prepared from liquid salt recycled after passing through the concentrated slurry.

27. (New) The method of claim 7, wherein the separately prepared liquid salt is substantially the same as the salt particulates.

28. (New) The method of claim 16, wherein the separately prepared liquid salt is prepared from liquid salt recycled after being filtered from the metal particulates.